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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,469	10/28/2003	Lynne C. Haynes	67608	5614

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EXAMINER	
CHAWLA, JYOTI	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/695,469	HAYNES ET AL.	
	Examiner	Art Unit	
	Jyoti Chawla	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Pintauro et al (US 3067036).

Pintauro et al, hereinafter Pintauro, teaches a gelatin dessert composition which includes mixing dry gelatin (9%) and sucrose, i.e., sugar (88.04%), both having the similar particle sizes, i.e., 100% passes through size 40 mesh and 20% pass through 100 mesh (Column 7, lines 5-11 and lines 25-44), where the particle sizes are in the range recited by the applicant. Sugar and gelatin in the composition taught by Pintauro are present in the ratio of about 10:1 which falls within the range (4:1 to 20:1) recited by the applicant.

Therefore Pintauro anticipates applicant's claims 16-20 as recited by the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.
Ascertaining the differences between the prior art and the claims at issue.
Resolving the level of ordinary skill in the pertinent art.
Considering objective evidence present in the application indicating obviousness or nonobviousness.

(A) Claims 1, 2, 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zietlow et al (US 6432460 B1) in view of Addesso (US 3362830).

Regarding claim 1 Zietlow et al, hereinafter Zietlow, teaches a process for preparation of aerated, gelatin-containing confections (Column 6, lines 2-4 and Column 9, lines 44-45) by heating a mixture of mono, di and oligosaccharides in water to fully dissolve all sugar and concentrate the mixture and obtain a concentrated sugar solution (Column 5, lines 7-13) and cooling the concentrated sugar solution(Column 11, lines 14-15). Zietlow also teaches admixing the aqueous solution of sucrose and gelatin with concentrated sugar solution to prepare a confection composition (Column 4, lines 6-11 and also Column 8, line 65 to Column 9, line2) and aerating the confection composition (Column 4, lines 18-21).

Regarding claim 1, Zietlow does not teach the dry mixing of sugar and gelatin before the addition of water as recited in steps (c), (d) and (e) of claim 1,

however Addesso teaches a cold water soluble gelatin product that is made by mixing sucrose and gelatin separately and subsequently mixing with water, heating the sugar and gelatin to dissolve gelatin and whipping and foaming the sugar and gelatin mix (Column 2, lines 37-40, Column 3, line 70-column 4, line 10 and column 5, line 5-10 and figure on page 1). Mixing dry sugar and gelatin and subsequently hydrating and heating the mixture were known in the art, as taught by Addesso. Therefore, one would have been motivated to modify Zietlow and mix dry gelatin and dry sugar before addition of water for optimizing hydration of gelatin, resulting in an aerated confection made with less gelatin while maintaining characteristic sponginess and elasticity. See also MPEP 2144.04 IV (C), which states that selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results.

Regarding claims 5, 6 and 7 Zietlow teaches dry particulates, i.e., gelatin and sugar and neutraceuticals etc., with a particle size of less than 400 microns or less, i.e., mesh size of 40 or smaller (Column 4, lines 12-16) as recited by the applicant.

Regarding claims 8, 9, Zietlow teaches dry particulates, i.e., dry gelatin, dry sucrose etc., are granulated to about the same particle sizes (Column 4, lines 12-16) as recited by the applicant.

Regarding claims 2, 10 and 11, Zietlow teaches making a concentrated sugar solution comprising mono, di and oligosaccharides (Column 5, lines 7-13) by heating sugars in water to fully dissolve them and obtain a concentrated sugar

solution having solids content of 70-99% by weight, i.e., moisture content of 1-30% (Column 4, lines 5-11 and Column 2, lines 45-53) as recited by the applicant.

Regarding claim 12, Zietlow teaches heating the slurry to a temperature range 120-212 ^{0}F and maintaining it at that temperature, before processing further (Column 9, lines 35-38). The temperature range taught by Zietlow is more than the minimum temperature requirement of 65^{0}F as recited by the applicant.

Regarding claim 13, Zietlow teaches cooling the concentrated sugar solution (i.e., aqueous sugar solution) to a temperature between 26-85 ^{0}C (Column 11, lines 24-26 and column 11, line 35-column 12, line 2), which encompasses applicant's recited range of less than 80^{0}C.

Regarding claims 14, 15 Zietlow does not teach the dry blend of sugar and gelatin and is silent as to their relative proportion, however Addesso teaches the dry blend as discussed above. The dry blend of sucrose and gelatin taught by Addesso has a weight ratio of 9:1 (Column 2, lines 37-40, Column 3, line 70-column 4, line 10 and column 5, line 5-10 and figure on page 1), which falls in the ranges recited by the applicant in claims 14-15. Appropriate proportion of sugar and gelatin is important for the effective solubility of gelatin in water. Therefore one would have been motivated to modify Zietlow and add dry mix of gelatin and sugar in the proportion taught by Addesso before addition of water to have optimal solubility of gelatin, resulting in production of final aerated confection with less gelatin while having desired sponginess and elasticity.

(B) Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zietlow and Addesso as applied to claims 1,2, 5-15, further in view of Gajewski (US 4251561).

Zietlow and Addesso are applied to claim 1 as described above.

Regarding claims 3 and 4 Zietlow in view of Addesso teach hydration of gelatin at a temperature of 26 to 85 ^{0}C (Column 11, lines 20-25) which encompasses the range recited by the applicant in claims 3 and 4 i.e., 40 ^{0}C to about 75^{0}C. Zietlow however, does not specify heating the gelatin solution and also does not specify the hold time of about 10 minutes. However Gajewski teaches making marshmallow where gelatin was added to cold water at about 80^{0}F, i.e., 26^{0}C and held for 15-60 minutes (Column 8, lines 15-20 and an 23-25) and subsequently heated to 150-212^{0}F, i.e., 65.5-100^{0}C (Column 8, lines 25-27), which encompasses the temperature ranges recited by the applicant in claims 3 and 4. It would have been obvious to one with ordinary skill in the art at the time of invention to dissolve gelatin and sugar mixture in cold water and subsequently heat the water to a desired temperature as taught by Gajewski, to prevent degradation of gelatin strength and make a marshmallow product with superior elasticity and overall quality.

Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addesso (US 3362830), in view of Zietlow et al (US 6432460 B1).

Regarding claims 16 - 20 Addesso teaches a cold water soluble gelatin product that is made by mixing sucrose and gelatin and subsequently mixing with water, heating and whipping and foaming the sugar and gelatin mixture as are present in the dry blend of sucrose and gelatin at a weight ratio of 9:1 (Column 2, lines 37-40, Column 3, line 70-column 4, line 10 and column 5, line 5-10 and figure on page 1) which falls in the ranges recited by the applicant in claims 16-20.

Addesso is silent about the particle size of sugar and gelatin however Zietlow teaches making aerated confections (marshmallow) where all dry ingredients added to the concentrated sugar solution (gelatin, sugar etc.) fall in the particle size range of 400 μ or less, i.e., 40 mesh or smaller, (Column 4, lines12-17 and column 12, lines 51-54) which includes the particle size requirement recited by the applicant in claims 16-20. Since Addesso makes a readily soluble gelatin product by mixing gelatin and sugar, it would have been obvious to modify Addesso and specifically employ sugar and gelatin particulates in the size taught by Zietlow in order to have a more uniform mix of the dry ingredients, a more homogenous gelatin and sugar suspension and a superior final product.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Chen et al (US 4338350) teaches a crystallized sugar product that readily disperses in water. Chen teaches that sugar crystals ranging in size from 3-50

microns and gelatin particles passing through Tyler 100 mesh screen as recited by the applicant in claims 14-20.

De Brou et al (3930052) teach gelatin compositions.

O'Donnell et al (US 5532017) teach melt restrict marshmallow with desired solids content and temperatures.

Tiainen et al (US 6403140 B1) and Cassanelli et al (US 3734745) teach dry gelatin and sugar in a gelatin product.

Anderson et al (US 4554169) teach gelatin particle sizes in the desired range.

Lehman et al (US 4571346) teach gelatin dessert mixes with gelatin particle sizes.

Zietlow et al (US 6180158 B1) teaches the process for making aerated confections, with sugar crystal size and the process for making concentrated sugar syrup.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jyoti Chawla
Examiner
Art Unit 1761

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KEITH HENDRICKS
PRIMARY EXAMINER